

1 **IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

2 Serial No.09/989,474
3 Filing Date Nov 20, 2001
4 Confirmation No. 3151
5 Inventorship..... Weihai Chen
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7 Group Art Unit 2151
8 Examiner KAMAL B. DIVECHA
9 Attorney's Docket No.MS1-2657US
10 Title: DISTRIBUTED DEVICE DISCOVERY FRAMEWORK FOR A
11 NETWORK

12 **PRE-APPEAL BRIEF REQUEST FOR REVIEW**

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14 Commissioner for Patents
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22 **REMARKS**

23 The Pre-Appeal Panel (hereinafter "Panel") is respectfully requested to
24 consider this Request. The Panel is requested to reconsider the rejections of
25 record in view of the following remarks.

26 **Rejection of Claims 1-2, 4-5, 7-8, 11-12, 14-15, 17-18, 24-25, 27-28, and 30-31**

27 The most recent Office Action dated October 7, 2005, as well as previous
28 Office papers, argues that these claims are anticipated by Publication No.
29 2002/0161883 A1 to Matheny et al. (hereinafter "Matheny"). However, Matheny,
30 which applicant summarizes at pages 14-16 of the response filed February 14,

1 2006, fails to teach or suggest at least three elements of independent claims 1, 11,
2 and 21, let alone additional elements recited by the dependent claims.

3 ***Matheny's Discovery Agents Do Not Discover Discovery Agents***

4 Applicant's independent claims recite a discovery agent discovering or
5 identifying other discovery agents on neighboring subnets in a network, which is
6 neither taught nor suggested by Matheny as described on Pages 18-20 of the
7 response filed February 14, 2006. The most recent Office Action asserts that
8 "discovering discovery agents" is "not recited in the rejected claims" (*Office*
9 *Action*, Page 2, Page 7). However, although claims 1 and 11 include an
10 intermediate clause between the words "discovering" and "discovery agents,"
11 the claims expressly recite "discovering . . . discovery agents." Similarly,
12 although claim 21 includes words that separate the term "discovery agent" from
13 the verb "identifying," claim 21 expressly recites that it is a "discovery agent"
14 that is "identifying" other "discovery agents." Thus, applicant asserts that the
15 element is, and always has been, recited in the claims.

16 Matheny fails to anticipate applicant's claims because Matheny's system
17 uses a "network manager" to direct discovery agents and aggregator agents to
18 perform network discovery operations. Matheny, from its own Figure 1, expressly
19 depicts the network manager and discovery agents as different entities. The
20 separateness of the network manager and discovery agents is expressly
21 emphasized in that "[d]iscovery agents may be on the same computer as the
22 discovery manager, or may reside on a remote machine" (*Matheny*, Page 1,
23 Paragraph 11). Thus, Matheny's network manager and discovery agents, even if
24 they reside on the same computer, are separate entities.

Moreover, not only are Matheny's network manager and discovery agents separate entities, but Matheny defines each as having separate and distinct roles. Matheny's "network manager may be a host computer that includes software for initiating and coordinating network discovery operations *using a number of different agents*" (Matheny, Page 1, Paragraph 10). By contrast, "*the discovery agents 106 collect information from targeted network devices . . . by polling devices* in a certain range of addresses or in a particular subnet" (Matheny, Page 1, Paragraph 11; emphasis added). Respectfully, even the passage of Matheny relied upon by the most recent Office Action makes clear that *discovery agents* collect information about *devices*, while the *network manager* collects information from the discovery agents:

FIG. 3 is a flowchart that describes a discovery operation 300 according to an embodiment. *The discovery operation 300 is initiated by the network manager 104* receiving a discovery request (block 302). The discovery request may include requested data types and designate an address range(s) or subnet(s) for discovery. The discovery request may be compared to the available capabilities defined by the matrix derived from the registration files in the agent directory. The *network manager 104* loops through files in a command directory, searching for XML files that match the address ranges or subnets identified for discovery (block 304). These files may include a high-level tag named <task> for easy recognition. *The network manager may then create a command file for each identified discovery agent*

(Matheny, Page 2, Paragraph 19; emphasis added). Matheny's network managers have one function (directing discovery agents) while discovery agents perform a different function (discovering devices). However, Matheny fails to teach or suggest a discovery agent that discovers or identifies other discovery agents.

For the sake of argument, even if one were to equate the discovery agents recited by the applicant's claims with Matheny's network managers, Matheny still fails to teach or suggest discovery agents that discover or identify other discovery

1 agents. Matheny does not state or imply that one of its network managers can
2 recognize, identify, or can discover network manager. Matheny recites that
3 “[m]ore than one network manager may be allocated to the network” (*Matheny*,
4 Page 1, Paragraph 10). However, Matheny nowhere discloses that one network
5 manager may identify or discover another network manager. Thus, Matheny fails
6 to disclose discovery agents that discover or identify other discovery agents,
7 and cannot anticipate the applicant’s claims.

8 ***Matheny Does Not Disclose Designating an Active Discovery Agent***

9 Matheny fails to teach or suggest designating a discovery agent as active.
10 Applicant’s independent claims disclose “designating, within a first subnet, a first
11 inter-subnet discovery agent on a first node as an active discovery agent,” as
12 recited in claims 1 and 11, and “a selection mechanism for designating the
13 active discovery agent within each subnet” as recited in claim 21. Matheny, if
14 anything, Matheny discloses the opposite. As previously recited, Matheny
15 recites that its network manager creates a “command file for *each identified*
16 *discovery agent*” (*Matheny*, Page 2, Paragraph 19; emphasis added). Because
17 Matheny does not describe designating discovery agents as active or inactive,
18 Matheny fails to teach or suggest, either expressly or inherently, this element.

19 ***Matheny Does Not Disclose Discovery Agents Propagating Search Requests***

20 Matheny does not disclose discovery agents propagating search requests
21 to other discovery agents. Applicant’s independent claims recite “propagating,
22 by the first node containing the active discovery agent, an inter-subnet resource
23 discovery search request to the active discovery agents on neighboring
24 subnets,” as recited in claims 1 and 11, or “a request propagation mechanism
25 by which nodes containing the active discovery agents propagate an inter-

1 subnet resource discovery search request to active discovery agents on
2 neighboring subnets” as recited in claim 21. As previously described,
3 Matheny’s discovery agents poll for resources in assigned or specified locations,
4 and the information retrieved may be used by a network manager. However,
5 Matheny discloses nothing regarding a discovery agent propagating a request to
6 another discovery agent. Similarly, even in a network that includes multiple
7 network managers, Matheny does disclose or suggest the possibility that one
8 network manager may be aware of another, or that one may propagate requests or
9 any other information to another. Matheny fails to disclose discovery agents
10 propagating requests and, thus, does anticipate the claims.

11 **Rejection of Claims 3, 6, 9, 13, 16, 19-23, 26, and 29**

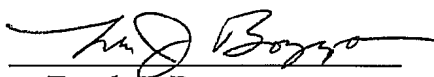
12 The most recent Office Action dated October 7, 2005, as well as previous
13 Office papers, argues that these claims are obvious. However, applicant submits
14 that these claims add additional limitations to the claims from which they depend.
15 Thus, these claims are patentable for at least the same reasons as independent
16 claims 1, 11, and 21.

17 **CONCLUSION**

18 The pending claims are in condition for allowance. Applicant respectfully
19 requests reconsideration and prompt allowance of the subject application.

20
21 Respectfully Submitted,

22 Date: 4-4-2006

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